

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (previously presented): An anomalous shadow detection system comprising  
anomalous shadow detecting means for detecting a suspected anomalous shadow from  
image data descriptive of an inputted image according to a prescribed detection process, and  
image output means for outputting information including at least information identifying  
the detected suspected anomalous shadow, wherein

the image output means further outputs type(s) and value(s) of one or more standard  
parameters concerning the suspected anomalous shadow in a visually recognizable manner  
together with the information including at least the information identifying the suspected  
anomalous shadow, wherein each of said one or more standard parameters is a parameter used  
for distinguishing the suspected anomalous shadow from a normal shadow, and the anomalous  
shadow detecting means detects the suspected anomalous shadow by judging whether a  
probability that a shadow detected according to the prescribed detection process is a malignant  
tumor is high.

2. (Original): An anomalous shadow detection system according to Claim 1, wherein the  
image output means is either of image display means or printing means.

3. (Original): An anomalous shadow detection system according to Claim 1, wherein the  
image output means further outputs certainty of detection of the suspected anomalous shadow

together with the information including the information identifying the suspected anomalous shadow.

4. (Original): An anomalous shadow detection system according to Claim 3, wherein the image output means is either of image display means or printing means.

5. (Original): An anomalous shadow detection system according to Claim 1, wherein said one or more standard parameters include at least one of calcification density, image density concentration of the suspected anomalous shadow, an output value of an iris filter, and malignancy/benignancy of the suspected anomalous shadow.

6. (Original): An anomalous shadow detection system according to Claim 5, wherein the image output means is either of image display means or printing means.

7. (Original): An anomalous shadow detection system according to Claim 1, wherein said one or more standard parameters include at least one of calcification density, image density concentration of the suspected anomalous shadow, an output value of an iris filter, and malignancy/benignancy of the suspected anomalous shadow, and wherein

the image output means further outputs certainty of detection of the suspected anomalous shadow together with the information including the information identifying the suspected anomalous shadow.

8. (Original): An anomalous shadow detection system according to Claim 7, wherein the image output means is either of image display means or printing means.

9.-14. (Canceled).

15. (previously presented): An anomalous shadow detection system comprising

anomalous shadow detecting means for detecting a suspected anomalous shadow from image data descriptive of an inputted image according to a prescribed detection process, and

image output means for outputting information including at least information identifying the detected suspected anomalous shadow, wherein

the image output means further outputs certainty of detection of the suspected anomalous shadow together with the information including the information identifying the suspected anomalous shadow, and the anomalous shadow detecting means detects the suspected anomalous shadow by judging whether a probability that a shadow detected according to the prescribed detection process is a malignant tumor is high.

16. (Original): An anomalous shadow detection system according to Claim 15, wherein the image output means is either of image display means or printing means.

17. (previously presented): An anomalous shadow detection system according to any one of Claims 1-8, and 15-16, wherein the information identifying the suspected anomalous shadow is either of an image of the suspected anomalous shadow or numerical data descriptive of a position, morphology or size of the suspected anomalous shadow.

18. (Previously Presented): An anomalous shadow detection system according to Claim 1, wherein the anomalous shadow detecting means detects the suspected anomalous shadow by judging whether the probability that the shadow detected according to the prescribed detection process is the malignant tumor is high, prior to the image output means outputting information including the at least information identifying the detected suspected anomalous shadow.

19. (Previously Presented): An anomalous shadow detection system according to Claim 15, wherein the anomalous shadow detecting means detects the suspected anomalous shadow by

judging whether the probability that the shadow detected according to the prescribed detection process is the malignant tumor is high, prior to the image output means outputting information including the at least information identifying the detected suspected anomalous shadow.

20. (previously presented): An anomalous shadow detection system according to claim 1, wherein said one or more standard parameters include at least one of calcification density, image density concentration of the suspected anomalous shadow, and an output value of an iris filter.

21. (previously presented): An anomalous shadow detection system according to claim 1, wherein the anomalous shadow detecting means comprises one of an iris filter and a morphology filter.

22. (previously presented): An anomalous shadow detection system according to claim 21, wherein the anomalous shadow detecting means comprises the iris filter, and the anomalous shadow detecting means further conducts a shape analysis on geometric features of the suspected anomalous shadow.

23. (previously presented): An anomalous shadow detection system according to claim 21, wherein the anomalous shadow detecting means comprises the morphology filter for detecting a suspected microcalcification shadow

24. (previously presented): An anomalous shadow detection system according to Claim 1, wherein the one or more standard parameters are a plurality of standard parameters.

25. (new): An anomalous shadow detection system according to Claim 1, wherein the anomalous shadow detecting means detects the suspected anomalous shadow from the image data descriptive of the entire inputted image and claim 1 further comprises means for defining a region of interest, the region of interest being a portion of the entire inputted image including the suspected anomalous shadow.

26. (new): An anomalous shadow detection system according to Claim 25, wherein the means for defining the region of interest detects a plurality of regions of interest from the entire inputted image, each of the plurality of regions of interest including a corresponding one of a plurality of suspected anomalous shadows.

27. (new): An anomalous shadow detection system according to Claim 26, wherein the image output means outputs the type(s) and the value(s) of one or more standard parameters concerning only one of the plurality of suspected anomalous shadows in a visually recognizable manner together with the information including at least the information identifying the one of the plurality of suspected anomalous shadows